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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 08/547,904 10/25/1995 TAKURO SEKIYA 2271/45006-A 8844 EXAMINER 7590 05/03/2004 IVAN S KAVRUKOV NGUYEN, JUDY COOPER & DUNHAM ART UNIT PAPER NUMBER 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036 2861

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	08/547,904	SEKIYA, TAKURO
	Examiner	Art Unit
	Judy Nguyen	2861
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on		
2a)⊠ This action is FINAL. 2b)☐ This	a)⊠ This action is FINAL . 2b)□ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
 4) ☐ Claim(s) 1,3-5,9 and 12-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1,3-5,9 and 12-18</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted or b) dobjected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Tribilitine oath or declaration is objected to by the Ex	anniner. Note the attached Office	Action of form F 10-132.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)	_	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	
Notice of Draisperson's Patent Drawing Review (P10-946) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)

DETAILED ACTION

Claim Objections

Claim 16 is objected to because of the following informalities: "4" (line 1) should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda (US 4,633,274).

Matsuda discloses the all features of the claimed invention as follows:

A recording head unit (1)

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- A nozzle (33)
- A passage of ink (35) in communication with the ink nozzle (33)
- A first guide member (the elongated edges of 1)
- An energization part (37)
- An ink inlet formed in communication with said passage for receiving said ink (4)
- An ink reservoir unit (5)
- A second guide member (28).

Claims 1, 5, 13, 17, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchikata et al (US 5,534,899).

Uchikata discloses the all features of the claimed invention as follows:

- A recording head unit (1) comprising a nozzle, a passage of ink in communication with the ink nozzle, an energization part (see description of recording head described through out specification)
- A first guide member (12) comprising a guide rail
- An ink inlet (10) formed in communication with said passage for receiving said ink
- An ink reservoir unit (2) having a rectangular shape having a front surface
 and a top surface
- A second guide member (13) comprising a guide groove

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The recording head unit (1) having a generally L-shaped form having a
front part (the portion between two elements 12) and a top part (the top
portion forming element 12) connected with each other

- Said recording head unit (1) carries said first guide member (12) at a lower surface of said top part, and said ink reservoir unit (2) carries said second guide member (13) at said top surface (clearly illustrated at least in Fig. 2)
- A carriage member (4001; Fig. 42) having a positioning part (4001d)
- Said ink reservoir unit carrying a vent (column 9, line 52 reference to a mechanism to introduce air which can be read as a vent)
- Said recording head unit (Fig. 42) having a positioning part (4002h)
- Said recording head unit carrying thereon electrode contacts (8002a5 illustrated in Fig. 77).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1, 3-5, 9, 12 are rejected under 35 U.S.C. '103(a) as being unpatentable over Kashimura et al. (5,245,361) in view of Cowger et al. (4,931,811).

Kashimura et al. disclose all basic claimed features of the invention of a method for recording and an ink jet recorder comprising a recording head unit 10 (Fig. 17) containing energization part to form ink jet hence suggesting the commonly incorporation of ink passage and nozzles in the head, an ink inlet 312k including filter means 311d, an ink reservoir 312 holding a deformable porous material/sponge 312a infiltrated with ink, a carriage 20 having a base part carrying an interconnection pattern 20a for establishing electrical contact with an interconnection pattern 10a of the head unit and a positioning part 20b (Fig. 5A) for determining the position of the head with respect to the carriage, wherein the head carries a first connection means 311a and a first guide part 311b connecting with a second connection means of elastic seal 312m and a second guide part 312b respectively on the reservoir which suggests to one skilled in the art that the reservoir connected to the recording head is removable therefrom.

Kashimura et al. do not disclose the filter to be made of stainless steel, a vent on the reservoir closed by a removable seal member.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a filter of stainless steel material, since it has been

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held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Nevertheless, Cowger et al. disclose an ink jet recorder wherein a stainless steel wire mesh filter 26 is utilized in order to prevent air from an ink reservoir being drawn down to a recording head; therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to incorporate the wire mesh filter of Cowger et al. into Kashimura et al. for the purpose of preventing air bubbles and hence dust particles from entering the recording head, as recognized by both teachings.

Cowger et al. also disclose a vent 30 closed by a removable seal member for supplying and replenishing air to the ink reservoir. Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to incorporate the vent with the removable seal member of Cowger et al. in Kashimura et al. for the purpose of providing ambient air communication to the ink reservoir.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive.

Applicant basically argues that while the projection 311b and the opening 312b have a function of engaging each other, they do not have a guiding function, that is, guiding the ink reservoir onto the recording head unit, as provided by the claimed invention

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recited in claim 1. However, Kashimura et al (column 17, line 66 – column 18, line 5) discloses that the head element 311 and the ink 312 is urged into each other due to the engagement between the opening 312b and the projection 311b having tapered surface. The tapered projection 311b and the opening 312b must be guided to each other to make a complete engagement because they were made to be corresponded to each other, i.e., like a puzzle, hence, they do have the function of guiding to each other because they were made to be corresponded to each other.

With respect to the argument regarding claim 13, applicant merely states what Matsuda teaches and alleges that Matsuda does not teach the claimed invention. Applicant's argument fails to comply with 37 CFR 1.111(b) because it mounts to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). Please note that the Office practice includes the independent claim in any 35 U.S.C. 102 rejection of a claim that is dependent on the independent claim. Since it became necessary to apply Uchikata et al reference against dependent claims 5, 17, and 18, it became incumbent upon the examiner to include independent claims 1 and 13 in the same rejection. Hence, it can be said that the amendment amending dependent claim 5

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and adding dependent claims 17 and 18 necessitated the new ground of rejection against independent claims 1 and 13.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy Nguyen whose telephone number is (571) 272-2258. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Judy Nguyen

Primary Examiner

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April 28, 2004